

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1-19. (Cancelled)

20. (Currently Amended) An external component of a cochlear implant hearing system, comprising:

a speech processor module operable in a stand-alone mode of operation and a body-worn mode of operation, and comprising an internal microphone, wherein said speech processor module receives signals from said internal microphone when operable in said stand-alone mode of operation; a housing, processing circuitry that receives signals output by a microphone, and one or more connectors; and

a protective case configured to have said speech processor module removably mounted therein; configured to interface with said one or more connectors, wherein said speech processor module is configured to be removably mountable within said case,

an external microphone positioned external to said protective case, wherein said case electrically connects said speech processor module to said external microphone when said speech processor is mounted in said case; and

an operational mode controller configured to determine when said speech processor module is mounted in said case and to place said speech processor module in said body-worn mode of operation when said module is mounted in said case,

wherein said module receives signals from said external microphone when operable in said stand-alone mode of operation,

wherein when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.

21. (Currently Amended) The external component of claim 20, wherein said case comprises:
a base member; and
a cover member matable with said base member to form an enclosure around said speech processor module when said module is mounted therein,
wherein when said cover member and said base member are attached to each other, said case is at least resistant to fluid ingress.

22-23. (Cancelled)

24. (Currently Amended) The external component of claim 20, wherein said speech processor module is configured to be operably connected to a power supply, wherein said case further comprises an on board power supply, and wherein said case electrically connects said on board power supply to said speech processor module when said speech processor module is mounted in said case.

25. (Cancelled)

26. (Previously Presented) The external component of claim 21, wherein said case is adapted to prevent all fluid ingress when said cover member is closed relative to said base member.

27. (Previously Presented) The external component of claim 21, wherein said case is adapted to at least substantially prevent dust ingress when said cover member and said base member are mated to each other.

28. (Previously Presented) The external component of claim 21, wherein said case further comprises:

a sheath with a gasket around the perimeter thereof, wherein said sheath overlies said speech processor module when said speech processor module is mounted in said base member, and wherein said gasket and said sheath, when in position, can seal with a perimeter wall of said base member.

29. (Currently Amended) The external component of claim 20, wherein said ~~one or more~~ connectors comprise speech processor module comprises a cable connector for receiving a cable, and wherein said case comprises an orifice configured to interface with said cable inserted in said cable connector, and wherein a grommet is provided to prevent fluid from entering said orifice.

30. (Currently Amended) A cochlear implant, comprising:

a speech processor module operable in a stand-alone mode of operation and a body-worn mode of operation, and comprising an internal microphone, wherein said speech processor module receives signals from said internal microphone when operable in said stand-alone mode of operation; comprising a housing, processing circuitry that receives signals output by a microphone, and one or more connectors; and

a protective case configured to have said speech processor module removably mounted therein; interface with said one or more connectors, wherein said speech processor module is configured to be removably mountable within said case;

an external microphone positioned external to said protective case, wherein said case electrically connects said speech processor module to said external microphone when said speech processor is mounted in said case; and

an operational mode controller configured to determine when said speech processor module is mounted in said case and to place said speech processor module in said body-worn mode of operation when said module is mounted in said case,

wherein said module receives signals from said external microphone when operable in said stand-alone mode of operation

wherein when said speech processor module is not mounted in said case said speech processor module is operable as a component of a behind-the-ear (BTE) speech processing unit, and when said speech processor module is mounted in said case said speech processor module is operable as a component of a body-worn speech processing unit.

31. (Currently Amended) The implant of claim 30, wherein said case comprises:

a base member; and

a cover member matable with said base member to form an enclosure around said speech processor module when said module is mounted in said case,

wherein when said cover member and said base member are attached to each other, said case is at least resistant to fluid ingress.

32- 33. (Cancelled)

34. (Currently Amended) The implant of claim 30, wherein said speech-processor module is configured to be operably connected to a power supply, wherein said case further comprises an on board power supply, and wherein said case electrically connects said on board power supply to said speech processor module when said speech processor module is mounted in said case,

35. (Cancelled)

36. (Previously Presented) The implant of claim 31, wherein said case is adapted to prevent all fluid ingress when said cover member is closed relative to said base member.

37. (Previously Presented) The implant of claim 31, wherein said case is adapted to at least substantially prevent dust ingress when said cover member and said base member are mated to each other.

38. (Previously Presented) The implant of claim 31, wherein said case further comprises: a sheath with a gasket around the perimeter thereof, wherein said sheath overlies said speech processor module when said speech processor module is mounted in said base member, and wherein said gasket and said sheath, when in position, can seal with a perimeter wall of said base member.

39. (Currently Amended) The implant of claim 30, wherein said ~~one or more connectors~~ comprise speech processor module comprises a cable connector for receiving a cable, and wherein said case comprises an orifice configured to interface with said cable inserted in said cable connector, and wherein a grommet is provided to prevent fluid from entering said orifice.

40- 46. (Cancelled)

47. (New) The external component of claim 24, wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on identification information supplied by said on board power supply to said operational mode controller.

48. (New) The external component of claim 24, wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on a value of a resistor in said on board power supply.

49. (New) The external component of claim 20, further comprising:

an externally-accessible switch, and wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on the configuration of said switch.

50. (New) The external component of claim 20, wherein said operational mode controller is configured to determine when said speech processor module is not mounted in said case and to place said speech processor module in said stand-alone mode of operation when said module is not mounted in said case,

51. (New) The external component of claim 50, further comprising:

a power supply configured to be detachably secured to said speech processor module when said module is not mounted in said case, and wherein said operational mode controller is configured to determine when said speech processor module is not mounted in said case based on information received from said detachable power supply.

52. (New) The external component of claim 30, wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on identification information supplied by said on board power supply to said operational mode controller.

53. (New) The external component of claim 34, wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on a value of a resistor in said on board power supply.

54. (New) The external component of claim 30, further comprising:

an externally-accessible switch, and wherein said operational mode controller is configured to determine when said speech processor module is mounted in said case based on the configuration of said switch.

55. (New) The external component of claim 30, wherein said operational mode controller is configured to determine when said speech processor module is not mounted in said case and to place said speech processor module in said stand-alone mode of operation when said module is not mounted in said case,

56. (New) The external component of claim 55, further comprising:

a power supply configured to be detachably secured to said speech processor module when said module is not mounted in said case, and wherein said operational mode controller is configured to determine when said speech processor module is not mounted in said case based on information received from said detachable power supply.